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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,505	04/02/2001	Makoto Horiuchi	5077-000027	3633

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EXAMINER

LEON, EDWIN A

ART UNIT PAPER NUMBER

2833

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,505

Applicant(s)

HORIUCHI ET AL.

Examiner

Edwin A. León

Art Unit

2833

ML

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003 and 24 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5, 12 and 16-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-5, 12 and 16-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☒ Interview Summary (PTO-413) Paper No(s) 20
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and Request for Continued Examination filed September 25, 2003 and October 24, 2003, Claims 3 and 19 have been amended and new Claim 23 has been added, have been place of record in the file as Papers No. 17 and 19, respectively.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 3-5, 12, 16, and 17-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kameya et al. (U.S. Patent No. 5,128,588). With regard to Claims 3 and 19-21, Kameya et al. discloses a discharge lamp comprising: a luminous bulb (1) in which a luminous material (Column 3, Lines 37-45) is enclosed and a pair of electrodes (3) are opposed in the luminous bulb (1); and a pair of sealing portions (2) for sealing a pair of metal foils (4, 5) electrically connected to the pair of electrodes (3), respectively; wherein each of the pair of metal foils (4, 5) has an external lead (5) on a side opposite

to a side electrically connected to a corresponding electrode (3) of the pair of electrodes (3), at least one of the pair of metal foils (4, 5) has a corrugated structure (Fig. 1) in which the metal foils (4, 5) are corrugated along a longitudinal direction of the metal foils (4, 5), wherein the corrugated structure (Fig. 1) has a wave crest extending in a direction of a relative shorter side of the metal foil (4, 5), the corrugated structure (Fig. 1) being provided in the sealing portion (2) and the metal foil (4, 5) having the corrugated structure (Fig. 1) has at least one wave portion (Fig. 1) in an area between an end of the electrode (3) and an end of the external lead (5) of the metal foil (4, 5). The method limitations are deemed inherent. See Figs. 1-2, Column 3, Lines 1-55.

With regard to Claim 4, Kameya et al. discloses at least one wave crest (Fig. 1) of the wave portion (Fig. 1) being provided in an area on the luminous bulb (1) side from a midpoint of the metal foil (4, 5) in the longitudinal direction of the metal foil (4, 5) (including the midpoint). See Figs. 1-2, Column 3, Lines 1-55.

With regard to Claim 5, Kameya et al. discloses a plurality of wave crests (Fig. 1) of the wave portion (Fig. 1) being provided in an area between the end of the electrode (3) and the end of the external lead (5) of the metal foil (4, 5). See Figs. 1-2, Column 3, Lines 1-55.

With regard to Claims 12 and 22, Kameya et al. discloses each of the pair of metal foils (4, 5) being tightly attached to a glass portion (12) extending from the luminous bulb (1), and each of the pair of metal foils (4, 5) is a molybdenum foil. The method limitations are deemed inherent. See Figs. 1-2, Column 3, Lines 1-55.

With regard to Claim 16, Kameya et al. discloses each of the pair of sealing portions (2) having a shrink seal structure. See Figs. 1-2, Column 3, Lines 1-55.

With regard to Claim 17, Kameya et al. discloses the luminous material (Column 3, Lines 37-45) comprising at least mercury. See Figs. 1-2, Column 3, Lines 1-55.

With regard to Claim 18, Kameya et al. discloses a reflecting mirror (Column 3, Lines 37-45). See Figs. 1-2, Column 3, Lines 1-55.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kameya et al. (U.S. Patent No. 5,128,588). Kameya et al. discloses the claimed invention except for the wave portion having amplitude of 1 to 2 mm and a radius of curvature of 1 to 4 mm.

Still, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the wave portion having amplitude of 1 to 2 mm and a radius of curvature of 1 to 4 mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Response to Arguments

6. Applicant's arguments filed September 25, 2003 have been fully considered but they are not persuasive. In response to Applicant's arguments regarding Claims 1 and 19 that the Kameya et al. reference doesn't show the metal foil having a wave portion in the sealing portion, Applicant is reminded that the Kameya et al. reference does meet the claim language in its broadest interpretation. It is clearly shown in Fig. 1 of the Kameya et al. reference that at least one of the pair of metal foils (4, 5) has a corrugated structure (Fig. 1) and that the corrugated structure (Fig. 1) is being provided in the sealing portion (2). Applicant's claims call for each of the pair of metal foils (4, 5) to have an external lead (5) and the metal foil (4, 5) to have the corrugated structure (Fig. 1) having at least one wave portion (Fig. 1) in an area between an end of the electrode (3) and an end of the external lead (5) of the metal foil (4, 5). It is the Examiner's opinion that the claims recite the lead as being part of the metal foil, which would allow the Kameya et al. reference to read on the claims. Since the lead (5) is part of the metal foil (4, 5), the metal foils (4, 5) has a corrugated structure (Fig. 1) and the corrugated structure (Fig. 1) is being provided in the sealing portion (2), which would make the Kameya et al. reference meet Applicant's claims.

In response to Applicant's argument that the Kameya et al. reference doesn't show the metal foils contributing to sealing, or the corrugated structure improving resistance to pressure, Applicant misinterprets the principle that claims are interpreted

Art Unit: 2833

in the light of the specification. Although these elements are found as examples or embodiments in the specification, they were not claimed explicitly. Nor were the words that are used in the claims defined in the specification to require these limitations. A reading of the specification provides no evidence to indicate that these limitations must be imported into the claims to give meaning to disputed terms. *Constant v. Advanced Micro-Devices Inc.*, 7 USPQ2d 1064.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (703) 308-6253. The examiner can normally be reached on Monday - Friday 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Edwin A. Leon
AU 2833

464-25

EAL
November 28, 2003